



National Renewable Energy Laboratory

National Center for Photovoltaics Statement on BP Solar Announcement

The development of thin-film photovoltaic (PV) technologies is one of the highest priority research activities of the U.S. Department of Energy (DOE) Solar Program of the National Center for Photovoltaics (NCPV) at the National Renewable Energy Laboratory. Last week, BP Solar announced that they are discontinuing their manufacturing efforts in amorphous silicon in Toano, Virginia, and in cadmium telluride in Fairfield, California. This decision—by one of the NCPV's leading industry partners in thin-film PV—requires us to reflect on the situation, sharing our views with the U.S. and world PV community.

First, and foremost, we accept BP Solar's public statement (and information shared with us privately) that this decision should not be viewed as a decreased interest in PV by BP Solar and its parent company, BP. To the contrary, reducing their technology portfolio at this time is a "business decision" by BP Solar to strengthen their worldwide position in photovoltaics. They intend to remain one of the world leaders in the manufacture and sale of PV modules and systems. BP Solar also intends to continue research efforts in future-generation PV technologies, including thin-film photovoltaics.

Second, neither BP Solar nor the NCPV view this decision as diminishing the potential of thin-film PV, specifically amorphous silicon and cadmium telluride. Rather, the situation underscores the importance of continued government support and research in these promising technologies. With support from the DOE/NCPV program and industry, thin-film PV has made significant progress during the past 25 years and is now in the crucial, high-risk transition to first-time manufacturing. The transition from laboratory successes to commercial products entails significant technical risks, including manufacturing scale-up of many orders of magnitude. Furthermore, the private sector faces considerable financial risks. Introducing new PV products in the marketplace requires that we address the complex technical issues associated with the outdoor reliability of the new PV modules. Manufacturing research and development, as well as the reliability of thin-film PV modules, remain the focus of our efforts in the NCPV and the DOE PV Program. Our Thin Film PV Partnership project, with some 40 U.S. industry and university partners, and an accomplished group of NCPV researchers, remains the hallmark of our efforts to help advance thin-film PV in the laboratory and, ultimately, in the commercial marketplace.

The DOE/NCPV program emphasizes research in thin films because they appear to have *potential* to be significantly less expensive than existing PV module technologies. Module cost (in dollars per watt) is a most important hurdle to overcome to make PV viable for supplying significant amounts of electricity in the United States and worldwide. We take considerable pride in the genesis of the thin-film technologies—and the fact that their progress is linked to support by the U.S. DOE program. We believe that the thin-film approaches will continue



evolve as successful partners with the crystalline technologies—helping to make PV the power of choice worldwide.

The NCPV would like to see a continuation of the work that BP Solar is now terminating, and we fully support BP Solar's efforts to find appropriate buyers for the technologies. To the extent possible, we will work with the new organizations in their desire to bring the two technologies to successful commercial production. Addressing and reducing the technical risks is the main focus of our mission—and we see continued success for PV with continued investment in research and development.

Thank you.

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